

IN THE CLAIMS:

Please cancel Claims 11 - 16, and 25-29 without prejudice. Please amend Claims 17, 19, and 21 - 23 as follows.

1 - 16. (Cancelled)

17. (Currently Amended) A variable axis immersion lens assembly for use with a charged particle beam, where the electron optical axis of the charged particle beam is shifted to be coincident at all times with a downstream deflected electron beam emanating from the immersion lens, said variable axis immersion lens comprising:

a at least two optical axis deflection coil coils located coaxial to the charged particle beam, which optical axis deflection coil coils is are used to shift the optical axis of the charged particle beam to be coincident with a downstream deflected electron beam;

an excitation coil located coaxial with respect to the optical axis deflection coil coils;

a magnetic field deflector coil used to coincide a magnetic axis of a magnetic field generated by the excitation coil with the shifted optical axis of the charged particle beam;

a first pole piece located coaxial to the excitation coil, the first pole piece extending at least partly around the excitation coil;

a ~~magnetic~~ magnetically floating field shield located coaxial to and downstream from the magnetic field deflection coil with regard to propagation of the charged particle beam from the magnetic field deflection coil;

a support for a target of the charged particle beam ~~and~~ , which support is downstream with regard to propagation of the deflected charged particle beam from the magnetic field shield, wherein the magnetic field shield is located intermediate the magnetic field deflection coil and the support, thereby limiting a magnetic field generated by the magnetic field deflection coil from radiating downstream into areas protected by the magnetic field shield.

18. (Original) The immersion lens assembly of Claim 17, wherein the first pole piece is of iron.
19. (Currently Amended) The immersion lens assembly of Claim 17, further comprising a second pole piece located coaxial to the magnetic field deflection coil, the second pole piece extending at least partly around the magnetic field deflection coil.
20. (Original) The immersion lens assembly of Claim 19, wherein the second pole piece is of ferrite.
21. (Currently Amended) The immersion lens assembly of Claim 17, wherein the ~~magnetic~~ magnetically floating field shield is at least approximately parallel to a magnetic equipotential surface of a magnetic field generated within the immersion lens by the excitation coil
22. (Currently Amended) The immersion lens assembly of Claim 17, wherein the ~~magnetic~~ magnetically floating field shield is of ferrite.
23. (Currently Amended) The immersion lens assembly of Claim 17, further comprising a detector located intermediate the ~~magnetic~~ magnetically floating field shield and the support for the target.
24. (Original) The immersion lens assembly of Claim 17, wherein the support for the target is of non-magnetic and electrically conductive material.
- 25 - 29. (Cancelled)